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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number 2 10/706,735 Filing Date: November 12, 2003

Wayne A. Weimer 1743

To Be Determined

Attorney Docket Number

34003.31

	U. S. PATENT DOCUMENTS							
Examiners Inliais	Cite No.	Document(Number 254	Publication Dates	Nameroficatentee or Applicant of Cited Documents				
HEA	AA	5,567,628	10-22-1996	Tarcha, et al.				
HEA	AB	5,609,907	03-11-1997	Natan				
MEA	AC	5,939,021	08-17-1999	Hansen, et al.				
HEA	AD	5,991,488	11-23-1999	Salamon, et al.				
MEA	AE	6,025,202	02-15-2000	Natan				
HEA	AF	6,608,716	08-19-2003	Armstrong, et al.				

FOREIGN PATENT DOCUMENTS						
7(Examiner): Gito / Foreign Patent (Pocument): Publication Date / Patente or Applicant of Cited / Pranslation Publication Date / Pranslation Date / P						
ASA	AG	WO 98/04902	02-05-1998	The University of Oregon, et al.		

		OTHER PRIOR ART
Examiners of Initials	Cite:	Include name of the author (in CA? In ALLUAINERS)), ruide of the critical, rule of the litem; date; page (s), volume - A
HEA	AH	Campion, Alan, et al., "Surface-Enhanced Raman Scattering", Chemical Society Reviews, Vol. 27, 1998, pp. 241-250.
HEA	Al	Gotschy, W., et al., "Thin Films by Regular Patterns of Metal Nanoparticles: Tailoring the Optical Properties by Nanodesign", Applied Physics B, 1996, pp. 381-384.
IAEA	AJ	Haynes, Christy L., et al., "Nanosphere Lithography: A Versatile Nanofabrication Tool for Studies of Size- Dependent Nanoparticle Optics", J. Phys. Chem. B, Vol. 105, No. 24, 2001, pp. 5599-5611.
HEA	AK	Huiteen, John C., et al., "Nanosphere Lithography: Size-Tunable Silver Nanoparticle and Surface Cluster Arrays", J. Phys. Chem. B, Vol. 103, No. 19, 1999, pp. 3854-3863.
HEA	AL	Jensen, Traci R., et al., "Nanosphere Lithography: Effect of the External Dielectric Medium on the Surface Plasmon Resonance Spectrum of a Periodic Array of Silver Nanoparicles", J. Phys. Chem. B, Vol. 103, No. 45, 1999, pp. 9846-9853.
ASA	AM	Jensen, Traci R., et al., "Nanosphere Lithography: Surface Plasmon Resonance spectrum of a Periodic Array of Silver Nanoparticles by Ultraviolet – Visible Extinction Spectroscopy and Electrodynamic Modeling", J. Phys. Chem B, Vol. 103, No. 13, 1999, pp. 2394-2401.
HEA	AN	Jensen, Traci R., et al., "Nanosphere Lithography: Tunable Localized Surface Plasmon Resonance Spectra of Silver Nanoparticles", J. Phys. Chem. B., Vol. 104, No. 45, 2000, pp.10549-10556.
HED	AO	Kim, W., et al., "Fractals in Microcavities: Giant Coupled, Multiplicative Enhancement of Optical Responses", Physical Review Letters, Vol. 82, Issue 24, June 14, 1999, pp. 4811-4814.
HEA	AP	Kneipp, Katrin, et al., "Single Molecule Detection Using Surface-Enhanced Raman Scattering (SERS)", Physical Review Letters, Vol. 78, No. 9, March 3, 1997, pp. 1667-1670.

Examiner Signature	In a	Um ?	Date Considered	5/10/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

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				Application Number 10/706,735		
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U. S. PATENT DOCUMENTS								
Examiners Initials	Cite No.	Document	Vumber 7	Publication Date	Name	of Patentee or	Applicant of	Cited Document
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FOREIGN PATENT DOCUMENTS						
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OTHER PRIOR ART						
Examiner's	Cite	Include name of the author (in CARITAL LETTERS); title of the article; title of the item, date; page(s) volume; the included in the item, date; page(s) volume; the item, date; page(s) volume; page(s) volume				
HEA	AQ	Levlin, M., et al., "Evaporation of Gold Thin Films on Mica: Effect of Evaporation Parameters", Applied Surface Science 115, 1997, pp. 31-38				
H8A	AR	Levlin, M., et al, "Evaporation of Silver Thin Films on Mica", Applied Surface Science 171, 2001, pp. 257-264				
HEA	AS	Link, Stephan, et al., "Shape and Size Dependence of Radiative, Non-Radiative and Photothermal Properties of Gold Nancrystals", Int. Reviews in Physical Chemistry, Vol. 19, No. 3, 2000, pp. 409-453.				
AEA	AT	Malinsky, Michelle Duval, et al., "Chain Length Dependence and Sensing Capabilities of the Localized Surface Plasmon Resonance of Silver Nanoparticles Chemically Modified with Alkanethiol Self-Assembled Monolayers", J. Am. Chem. Soc., Vol. 123, No. 7, 2001, pp. 1471-1482.				
AEA	ΑU	Malinsky, Michelle Duval, et al., "Nanosphere Lithography: Effect of Substrate on the Localized Surface Plasmon Resonance Spectrum of Silver Nanoparticles", J. Phys. Chem. B., Vol. 105, No. 12, 2001, pp. 2343-2350.				
MEA	AV	Mulvaney, Shawn P., et al., "Raman Spectroscopy", Analytical Chemistry, Vol. 72, No. 12, June 15, 2000, pp. 145R-157R.				
464	AW	Nie, Shuming, et al., "Probing Single Molecules and Single Nanoparticles by Surface-Enhanced Raman Scattering", Science, Vol. 275, February 21, 1997, pp. 1102-1106.				
HEA	AX	Schlegel, Vicki L., et al., "Silver-Island Films as Substrates for Enhanced Raman Scattering: Effect of Deposition Rate on Intensity", Analytical Chemistry, Vol. 63, No. 3, February 1, 1991, pp. 241-247.				
HEA	AY	Van Duyne, R. P., et al., "Atomic Force Microscopy and Surface-Enhanced Raman Spectroscropy. I. Ag Island Films and AG Film Over Polymer Nanosphere Surfaces Supported on Glass", J. Chem. Phys., Vol. 99, No. 3, August 1, 1993, pp. 2101-2115.				
HEA	AZ	Weimer, W. A., et al., "Tunable Surface Plasmon Resonance Silver Films", Applied Physics Letters, Vol. 79, No. 19, November 5, 2001, pp. 3164-3166.				

Date Considered	5/10/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

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	U. S. PATENT DOCUMENTS								
Examiner's	Cite :	Document Number	Publication Date:	Name of Patentee or Applicant of Cited Document					
MEA		5,846,610	12/1998	Sunderland					
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	FOREIGN PATENT DOCUMENTS							
Examiner's	Cite !	Foreign Palent Figure 10 Documents 7. 10 [County Code - Number - Kind)	Publication Date	Ratentee or Applicant of Cited 1	Translation (
ABA		0 646 660 A1	4/1995	Kodak Limited	N/A			

OTHER PRIOR ART					
Examiner's	Cite No.⊷	Include name of the author (in CAPITAL LETTERS), title of the article, title of the Item, date, page(s), volume.			
HEA	``	Sennett, R. S. et al., "The Structure of Evaporated Metal Films and Their Optical Properties," Journal of the Optical Society of America, Vol. 40, No. 4, April 1950, pp. 203-211.			
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

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